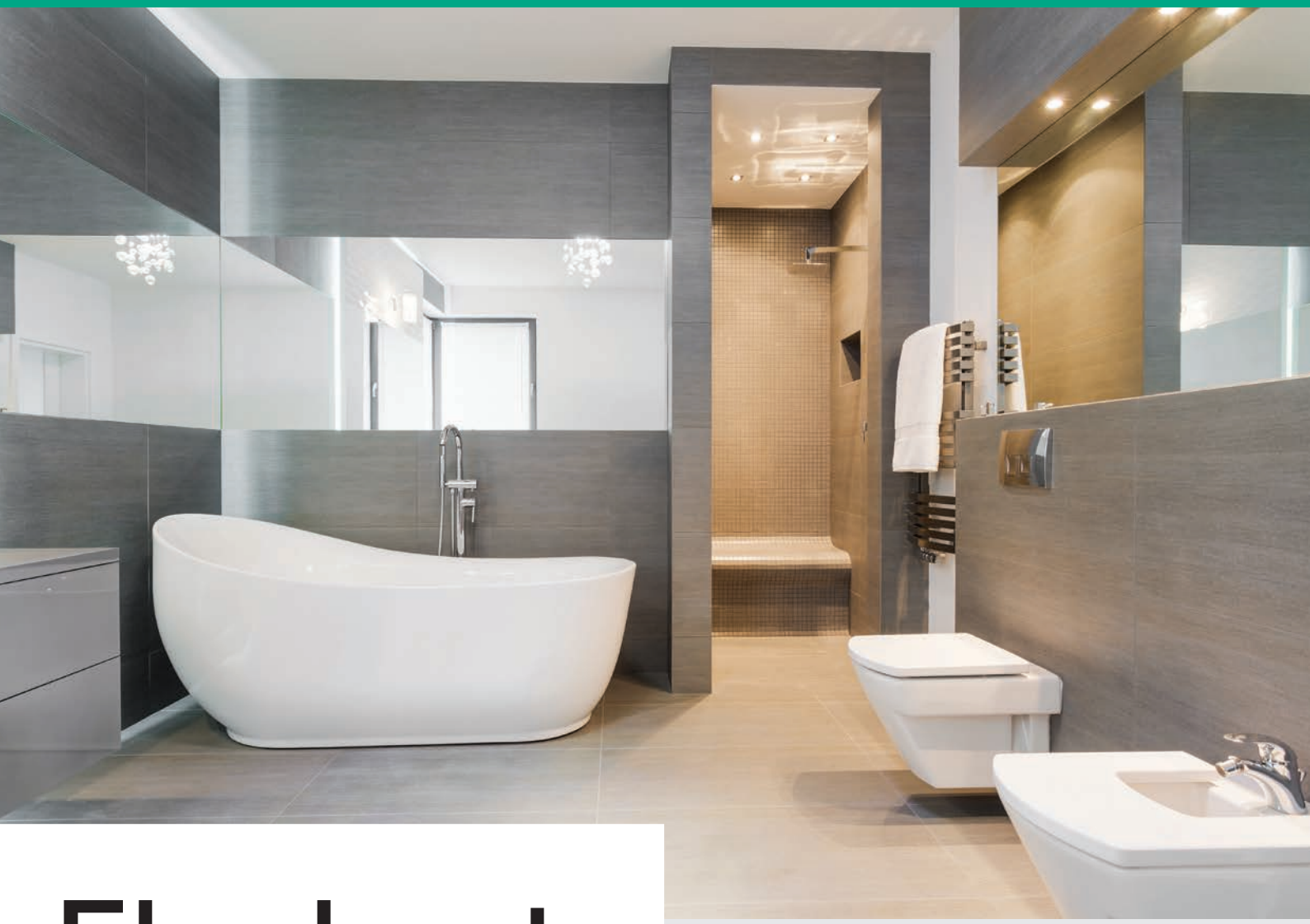
Elephant Plasterboard
Wet Area Systems Manual
July 2017



Elephant WET AREA SYSTEMS

www.elephantplasterboard.co.nz

Elephant Plasterboard
STRENGTH WITH STYLE

Elephant Aquaboard Wet Area Systems Guide

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This Warrantee covers Elephant Plasterboard products and or systems for a minimum of 10 years from the date of the purchase.
Elephant Plasterboard supplies products which are warranted to be free from defects. Any products found to be defective before or after installation will be replaced and/or repaired, provided installation has been in accordance with Elephant Plasterboard's technical literature.

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Contents

INTRODUCTION

This publication is to serve as a guide only and to provide information about best practise in areas which are regarded as Wet Areas in both residential and non-residential buildings. These areas are detailed in the New Zealand Building Code clause E3 Internal Moisture.

Defining Wet Areas

Wet areas are spaces where fresh water is reticulated and are generally located in areas such as bathrooms, toilets, laundries and kitchens. There are two general categories of wet areas as follows:

- **Shower and Bath Enclosures**

  These are areas subject to frequent and heavy water splash such as enclosed showers, unenclosed shower zones and showers over baths.
  NZBC E3/AS1 Internal Moisture requires shower space walls to have impervious finishes.
  The details between walls and shower bases, baths and floors must also be impervious (water proof). Shower areas must additionally be waterproof. This can be achieved using proprietary rigid shower lining systems, flexible vinyl shower wall finish, or tiling.
  Tiled shower areas must include a wet area waterproofing membrane system under the tiles.
- **Water Splash**

  These are areas subject to intermittent splashing of water such as around, vanities, tubs and sinks. These areas must be finished with surfaces and joints that are impervious and easily cleaned.

Impervious Areas

For Example

- Shower Walls
- Shower Over Bath Walls
- Wall Surfaces To Bath Edges

Impervious Wall Finishes

- A waterproofing membrane finished with ceramic or stone tiles having 6% maximum water absorption, waterproof grouted joints, and bedded with an adhesive specified by the tile manufacturer as being suitable for the tiles, substrate material and the environment of use.
- A preformed proprietary shower lining.
- Water resistant sheet linings finished with decorative high pressure laminate or factory applied polyurethane or resin. (Purpose made sheet shower lining.)

Elephant Aquaboard Product Description

Elephant Aquaboard plasterboard wall and ceiling lining is specifically designed for wet areas. It is formulated to resist the effects of moisture and humidity. Elephant Aquaboard is available in 10mm thick weighing nominally 8.3 kg/m^2 and 13mm thick weighing nominally 11.2 kg/m^2. Elephant Aquaboard is manufactured with a light green paper, with tapered edges and is an ideal wall substrate for waterproof membranes, shower linings and ceramic tiles. It is important that reference is made to separate publications for bracing systems, fire and noise control systems in regard to fixing and jointing requirements and recommendations.

Serviceable Life

Elephant Aquaboard has a serviceable life of at least 15 years as a fully protected shower or water splash lining, provided that all linings directly exposed to water have an approved waterproof membrane protecting the Aquaboard.
As a general wall and ceiling lining Elephant Aquaboard will have a serviceable life in excess of 50 years. The ability of Elephant Aquaboard to remain durable is dependent on being protected and remaining dry in service, and being maintained.

Limitations & Conditions of Use

Elephant Aquaboard must not be used in the following situations:

- For bracing applications in or around baths and shower areas.
- In areas of high humidity (above 90% RH) or continually wet such as group shower, steam rooms, swimming pools, or chlorine type environments.
- Elephant Aquaboard must not be installed over a vapour barrier.
- Elephant Aquaboard must not be applied directly to masonry, concrete or solid plaster or other sheet lining materials. Unless timber strapping or steel furring channels are used.
- Exposed to temperatures of 52ºC or greater for prolonged periods.
- Elephant Aquaboard may not be used as an external lining.

Elephant Plasterboard systems are intended for normal conditions of dry internal use. All performance testing of Elephant Plasterboard Systems has been carried out using dry ex-factory product.
Elephant Plasterboard Drywall systems must not be exposed to liquid water or be installed in situations where extended exposures to humidity above 95% Relative Humidity are to be expected. A suitable surface finish must be applied to Elephant Plasterboard in all areas where liquid water or high humidity can be expected. Vinyl wallpaper and gloss and semi-gloss alkyd paints are suitable systems. Bathrooms, kitchens and laundries for example should have adequate ventilation or heating to avoid condensation build-up.

INTRODUCTION

Building Code Compliance

Elephant Plasterboard is manufactured to the International Standard ISO 9001 and AS/NZS 2588, and has been specifically designed to meet New Zealand and Australian Standards and Building Code requirements. Elephant Plasterboard has been marketed internationally since 1975 and the product has established an excellent history of performance for its use in buildings throughout New Zealand and Australia. Elephant Plasterboard meets the durability requirements of the NZBC and BCA and is subject to use, installation and maintenance in accordance with the Manufacturer's instructions.

- **Clause B1 Structure:**

  Performance B1.3.1, B1.3.2 and B1.3.4. Elephant Aquaboard Wet Area Plasterboard Systems meet the requirements for loads arising from self-weight, earthquake, wind and impact [i.e. B1.3.3 (a), (f), (h) and (j)].

  These performances relate to Aquaboard used in Elephant Plasterboard Bracing Systems. Self-weight and impact refer to the general use as a lining.

- **Clause B2 Durability:**

  Performance B2.3.1 (a) not less than 50 years, B2.3.1 (b) 15 years and B2.3.1 (c) 5 years. Elephant Aquaboard Wet Area Plasterboard Systems meet these requirements.

  Not less than 50 years relates to the use of Elephant Aquaboard as a Bracing System within the areas, bathrooms, kitchens and laundries not exposed to direct water. 15 years relates to the use of Elephant Aquaboard when used behind baths, showers and splash-backs, directly exposed to water. 5 years relates to the general use as a wall & ceiling lining.

- **Clause E3 Internal Moisture:**

  Performance E3.3.4, E3.3.5 and E3.3.6. Elephant Aquaboard Wet Area Plasterboard Systems meet these requirements. When installed in accordance with this Technical Literature, Elephant Aquaboard Wet Area Plasterboard Systems will provide wall surfaces adjacent to sanitary fixtures and sanitary appliances that are impervious and easily cleaned. The construction methods meet with the internal moisture requirements of the NZBC Acceptable Solution E3/AS1. To minimise internal condensation, adequate levels of ventilation and thermal resistance must be provided to all spaces where moisture may be generated.

- **Clause F2 Hazardous Building Materials:**

  Performance F2.3.2. Elephant Aquaboard Wet Area Plasterboard Systems meet this requirement and will not present a health hazard to people.

Maintenance of Elephant Plasterboard Drywall Systems

The building must be maintained weather-tight and all lining systems protected from internal and external moisture. Finishes to shower and water splash areas, including tiles, grout, waterproof membranes, sealants and flexible sheet vinyl must be checked to ensure the integrity of the system is maintained. They must be repaired or replaced if necessary. When repairing or replacing finishes, the Aquaboard substrate must be checked for defects and repaired or replaced, as required.

The long term durability of an Elephant Plasterboard system is conditional upon the systems being kept dry in service, compliance with the New Zealand Building Code clauses E2 External Moisture and E3 Internal Moisture. This compliance ensures dry internal conditions and alleviates the circumstances which may lead to timber movement, corrosion of metal components, moisture uptake by the gypsum core and fungal growth.

Elephant Plasterboard is a finishing material and must be fully protected during construction from direct sunlight, moisture and direct impact. NZBC Clause C1 Outbreak of Fire provides for a performance under C1.3.2 that a fixed appliance shall not raise the temperature of an element to a level that would adversely affect its physical properties. The maximum service temperature for Elephant Plasterboard is 45°C; above which the gypsum core undergoes chemical conversion.

The paper face of the Elephant Plasterboard should be kept intact and care exercised during wet stripping of wallpaper, afterwards the surface made good wherever necessary prior to redecoration. The making good of the paper face is important because plasterboard is a composite laminate and the gypsum core and paper face each contribute to the lining's performance.

The making good would include using paper jointing tape and jointing compounds over scratches or cuts in the paper face. Any surface damage to the paper face or corners caused by normal 'wear and tear', should be made good as soon as practicable, otherwise ongoing wear and tear if it remains unchecked may lead to the integrity of the board being compromised. If cracks occur at the joints or nail pops occur in the surface of the board, the reason for the problem should be investigated and rectified. The cracks and nail pops should be made good as soon as practicable thereafter.

Control joints should be provided to relieve stresses imposed by movement due to moisture, temperature or structural changes. Details of joint design should be obtained from the designer where control joints have been specified to be carried through Elephant Plasterboard linings.

If cracks occur at junctions of elements or at joints in various systems, they must be made good immediately. The penetration of fire and sound control systems by unprotected services is detrimental to their performance and must be avoided.

GENERAL FIXING AND INSTALLATION

Wall Framing

Timber framing must comply with NZS 3604 or to a specific design in accordance with NZS 3603 and AS/NZS 1170. Where specific design is required, the framing must be of at least equivalent stiffness to the framing provisions of NZS 3604. Timber framing must have a maximum moisture content of 18% at the time of the lining. Steel framing must be to a specific design meeting the requirements of the NZBC.

- Studs must be at maximum 600mm centres.
- Nogs must be provided in both timber and steel framing as follows:

  Adjacent to pipe and fixture penetrations.

  Behind sink and tub flashing.

  At bath flanges and shower bases.

  To support towel rails, grab rails and wall brackets.

  Behind all Aquaboard sheet joints in impact areas such as shower cubicles and showers over baths.

Corner Angle

- Before fixing Aquaboard in shower areas or bath areas the internal corners shall be fitted with a PVC or galvanised metal angle. This only applies to tiled areas.

Plasterboard Fixing

- Aquaboard may be fixed vertically or horizontally noting the requirements for Nogs above
- Fixings should be 12mm min from paperbound edges and 18mm min from sheet ends or cut edges
- Provide a 6 -10mm gap at the wall/floor junction
- Provide a 6 -10mm gap between the bottom edge of the board and any bath rim or shower base to allow for the placement of sealant
- Aquaboard sheets must be touch fitted.

When tiling refer to more detailed fixing instructions below.

Jointing

- Jointing shall be carried out in accordance with instructions in the Elephant Plasterboard Installation Guide.
- Water resistant stopping compound is recommended for the first two coats.
- No top coat is required under waterproofing membranes and tiling.

Waterproofing Membranes

- A waterproofing membrane must be used under all tiled walls in showers or shower over bath areas.
- Floor & wall junctions must form part of the waterproofing system & be appropriately detailed. Refer: BRANZ Good Practice Guide – Tiling.
- The waterproofing membrane must be fully cured, stopping compounds cured and sealers dry, before tiling.

Penetrations and Sealants

It is important that special attention is given around penetrations and junctions between different building elements as water ingress and leaks are most common in these areas.

- Pipe penetration cutouts should be made accurately and slightly over sized but no more than 12mm in diameter greater than that of the pipe.
- Sealants must be of the mould inhibiting type and be neutral cure.
- The sealant should be applied to the full depth of the Elephant Aquaboard in the following locations:

  Around all taps and pipe penetrations.
  The gap between the bottom edge of the plasterboard and bath rims.
  The gap between the bottom edge of plasterboard and the upstand of the preformed shower base.
  Seal all gaps between the bottom edge of the plasterboard and finished floor when an impervious junction is required and between the floor and wall.
- It is important to avoid shower heads or taps or other penetrations on fire rated or inter tenancy walls.

Tiling

- Control joints must be provided at a minimum of 4m centres.
- Elephant Aquaboard is a suitable substrate for tiling. It is important to note the following tile weight limitations:

  10mm Elephant Aquaboard - tile weights up to and including 20kg per sqm
  13mm Elephant Aquaboard - tile weights up to and including 32kg per sqm
- Screw fixing only are to be used for tiled walls as follows:

  10mm Aquaboard use minimum 25mm x 6g Drywall Screws

  13mm Aquaboard use minimum 32mm x 6g Drywall Screws.
- Screw off at 100mm centres up each stud and the perimeter of the board only to the tile height.
- No adhesives behind the Aquaboard to where the tiles will be laid.
- Tiling must be undertaken in accordance with AS 3958.1

GENERAL FIXING AND INSTALLATION

Ceilings

Ceiling Framing

Framing dimensions must comply with NZS 3604:2011. If fire noise control or bracing considerations are relevant, refer to the appropriate technical information.

Steel battens are recommended as they are more dimensionally stable, but timber battens may be used.
Space battens at maximum 600mm centres for 13mm Aquaboard and 450mm centres for 10mm Aquaboard.

Fixing of linings

Fasteners

Steel battens: 25mm x 6 gauge self tapping drywall screws.
Timber battens: 32mm x 6 gauge coarse thread drywall screws (Nailing is not recommended).

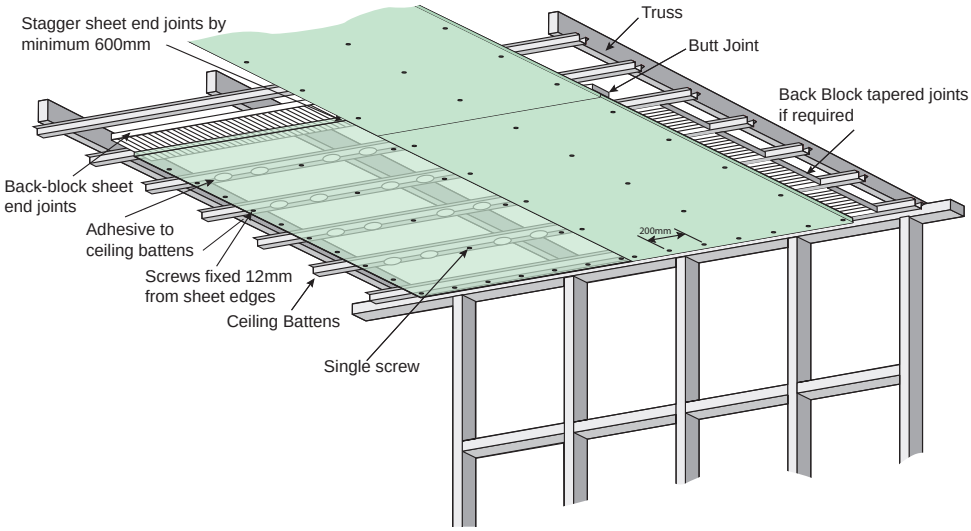
Fastening Centres

- Fix screws at 300mm centres at sheet edges and sheet centre
- Apply adhesive to battens or joists at 200mm centres between centre and edge of sheet.
- Single screws to be minimum 12mm from sheet edge.
- Fix the edges of the sheet at the wall junction at 200mm centres.
- Adhesive must not be applied to the sheet edges or under screws. This may contribute to screw popping.

Linings

- Fix ceiling sheets across battens or joists.
- Start fixing from the centre of each sheet outwards.
- Position the sheet hard up to the framing, single screw at the centre line and the edges across each batten.
- Press the plasterboard where adhesive has been applied to ensure full contact.
- Sheet end joints must not be made on framing and must be back-blocked.
- Back-blocking of sheet ends and recessed joints is essential for a high quality finish.
- All joints between sheets should be touch fitted.
- Use long length sheets to minimise sheet end butt joints.

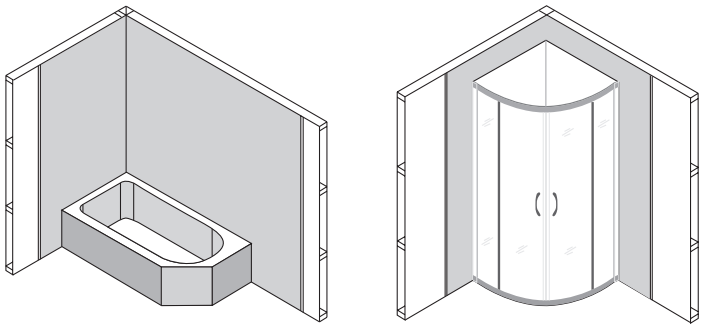
The use of a drywall lifter will greatly assist the installer in achieving optimum results.



Bracing In Wet Areas

Elephant Plasterboard Bracing Systems must not be used behind showers and baths. This is because of the practical aspects of fixing and the fact that showers and baths are likely to be replaced or the ability to access difficult areas. The NZBC B2 Durability requirement for bracing systems is at least 50 years if the bracing is not easily accessible. Elephant Plasterboard Bracing Systems can be used elsewhere in wet areas including water splash areas provided the finish is maintained impervious for the life of the building.

References should be made to the Elephant QuickBrace Systems Manual regarding the application of bracing systems.



Shaded area must not have Plasterboard Bracing Systems

DETAILED FIXING

Non–Tiled Walls – Timber Frame Horizontal & Vertical Method

Wall Framing

- Dimensions for framing must comply with NZS 3604:2011 requirements.
- Timber Framing moisture content should be between 12–18% when lining is installed.
- Studs must be spaced at 600mm centres maximum when using either 10mm or 13mm Elephant Plasterboard
- Nogs to be evenly spaced where possible with a maximum spacing of 1350mm alternative nogs/dwangs staggered to a maximum of 150mm from either side of the centre line.
- Nogs are not required behind horizontal joints except in shower or shower over bath situations or when it is a requirement in order to comply with fire or acoustic system specifications.

Fixing of Linings

Fasteners

- 10mm Aquaboard use minimum 25mm x 6g Drywall Course Thread Screws or 30mm x 2.8mm Clouts.
- 13mm Aquaboard use minimum 32mm x 6g Drywall Course Thread Screws or 30mm x 2.8mm Clouts.

Fastening Centres

- Fasteners should be at 300mm centres around the sheet perimeter.
- Screws or clouts should be fixed no less than 12mm from the sheet edge.
- Apply adhesive at maximum 300mm centres to intermediate studs and to the centre of each nog.
- Single screw to each stud where horizontal joints cross the studs.
- Adhesive must not be applied to the sheet edges or under nails or screws. This may lead to nail or screw popping.

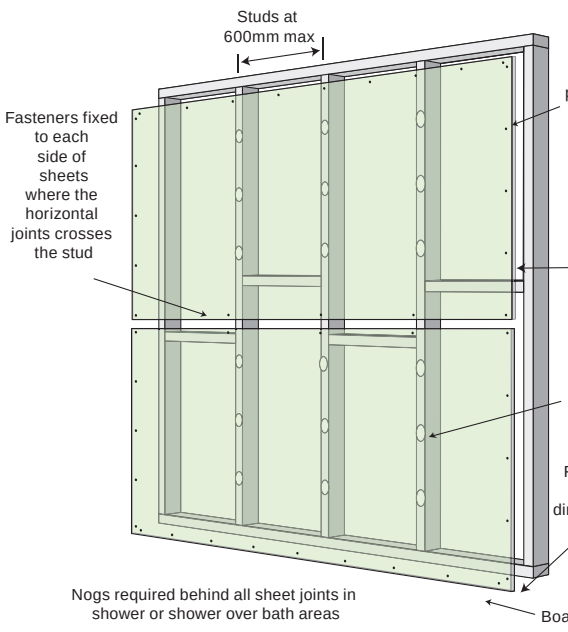
Lining

- Leave a 5–10mm gap at the floor level to allow for movement in timber framing.
- Sheet end joints made on framing should be staggered 600mm by fixing to different studs.
- All joints between sheets should be touch fitted.

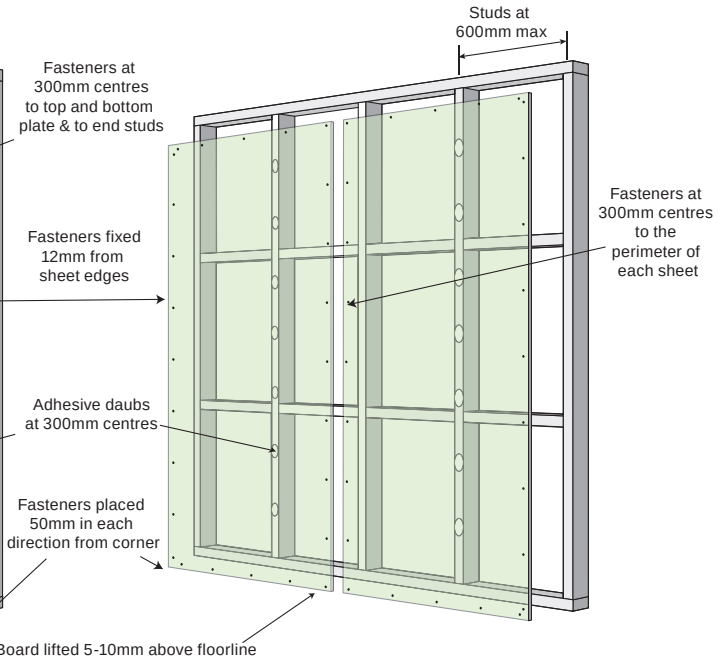
Jointing

- All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. All in accordance with the Elephant Plasterboard Installation Guide.

Fixing of Linings - Horizontal



Fixing of Linings - Vertical



DETAILED FIXING

Non Tiled Walls – Steel Framing Vertical and Horizontal Method

Wall Framing

- Steel stud dimensions should be 63 x 34 x 0.55mm minimum with a 6mm return.
- Steel channel dimensions should be 63 x 30 x 0.55mm minimum.
- Stud spacing should be at 600mm centres maximum.
- Studs need to be placed with the open side facing in the same direction.
- The correct order for attaching the board is crucial, as the face of the steel stud can deflect initially. The first board will deflect slightly when attached to the open side of the stud, but when the screw is fully tightened it will pull back tight against the board. There will be minimal deflection when the second sheet is attached, as the open flange is now supported by the first one. Support the stud to avoid twisting.

Fixing of Linings

Fasteners

- 10mm and 13mm Aquaboard use minimum 25mm x 6g Self Tapping Drywall Screws

Fastening Centres

- Screws should be at 300mm centres around the sheet perimeter.
- Screws should be fixed no less than 12mm from the sheet edge.
- Apply adhesive at maximum 300mm centres to intermediate studs.
- Single screw to each stud where horizontal joints cross the studs.
- Adhesive must not be applied to the sheet edges or under screws. This may lead to screw popping.

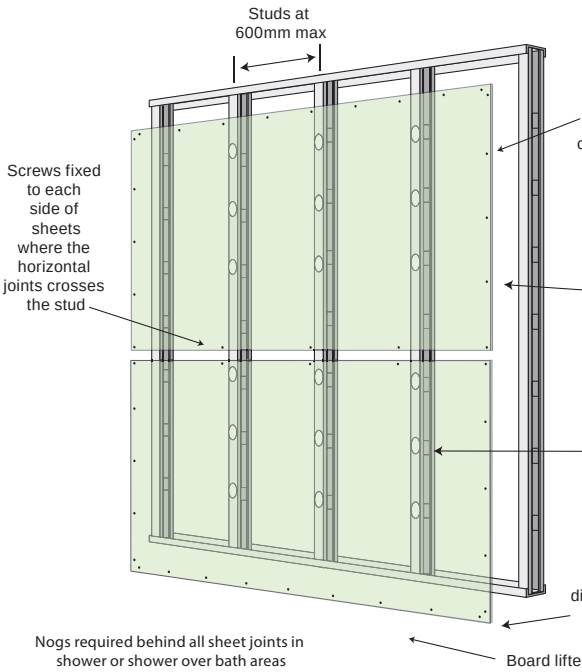
Lining

- Leave a 5–10mm gap at the floor level to allow for movement of the framing.
- Sheet end joints made on framing should be staggered 600mm by fixing to different studs.
- All joints between sheets should be touch fitted.
- For stud heights greater than 2.4m it is recommended to use 13mm Plasterboard or greater.

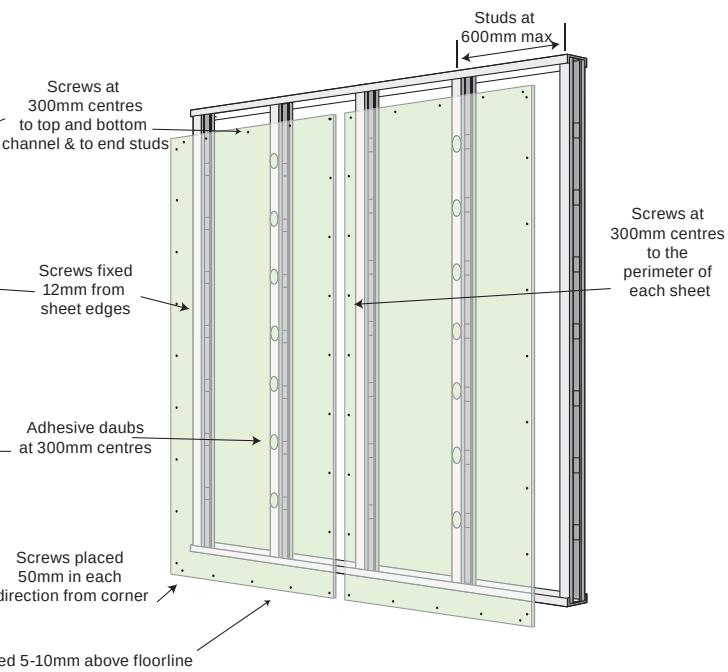
Jointing

- All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. All in accordance with the Elephant Plasterboard Installation Guide.

Fixing of Linings - Horizontal



Fixing of Linings - Vertical



DETAILED FIXING

Tiled Walls – Timber Framing Vertical and Horizontal Method

Wall Framing

- Dimensions for framing must comply with NZS 3604:2011 requirements.
- Timber Framing moisture content should be between 12–18% when lining is installed.
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- Nogs to be evenly spaced where possible with a maximum spacing of 1350mm alternative nogs/dwangs staggered to a maximum of 150mm from either side of the centre line.
- Nogs are not required behind horizontal joints except in shower or shower over bath situations or when it is a requirement in order to comply with fire or acoustic system specifications.

Tile Weight Limitations

- Elephant Aquaboard is a suitable substrate for tiling. It is important to note the following tile weight limitations.

  10mm Elephant Aquaboard - tile weights up to and including 20kg per sqm
  13mm Elephant Aquaboard - tile weights up to and including 32kg per sqm

Fixing of Linings

Fasteners

- 10mm Aquaboard use minimum 25mm x 6g Drywall Course Thread Screws
- 13mm Aquaboard use minimum 32mm x 6g Drywall Course Thread Screws.

Fastening Centres

- Screw fixing is 100mm up each stud and to the perimeter of each sheet, this also includes all intermediate studs only to the height of the tiles. Anything over the tile height only requires to be fixed as per standard fixing details.
- Screws should be fixed no less than 12mm from the sheet edge.
- Adhesive must not be used.

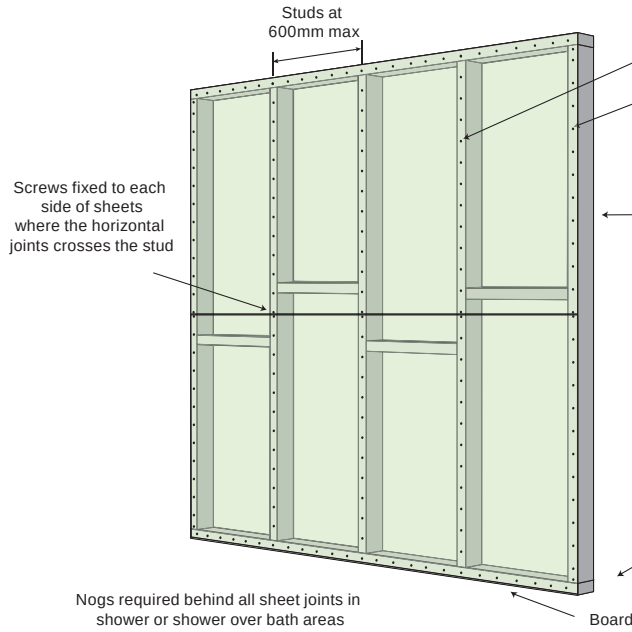
Lining

- Leave a 5–10mm gap at the floor level to allow for movement in timber framing.
- Sheet end joints made on framing should be staggered 600mm by fixing to different studs.
- All joints between sheets should be touch fitted.

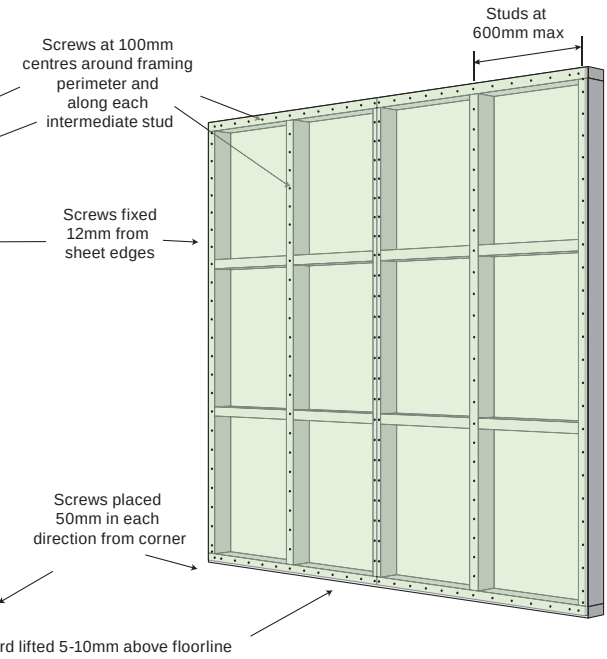
Jointing

- All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. All in accordance with the Elephant Plasterboard Installation Guide.
- No finishing coat is required where the joints are covered by the tiles.

Fixing of Linings - Horizontal



Fixing of Linings - Vertical



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Lining

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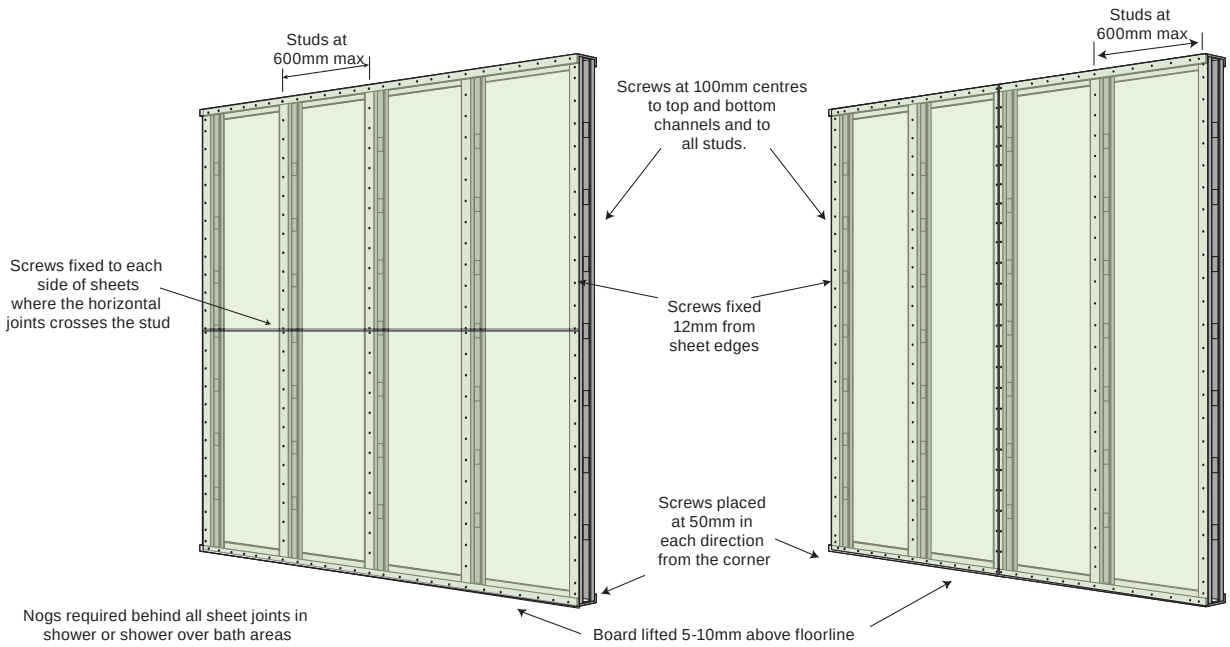
- All joints between sheets should be touch fitted.
- For stud heights greater than 2.4m it is recommended to use 13mm Plasterboard or greater.

Jointing

- All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. All in accordance with the Elephant Plasterboard Installation Guide.
- No finishing coat is required where the joints are covered by the tiles.

Fixing of Linings - Horizontal

Fixing of Linings - Vertical



DESIGN DETAIL

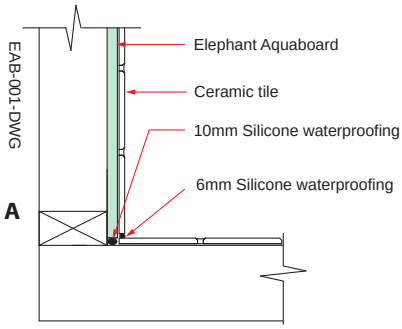
Showers - Tiled Walls and Tiled Base

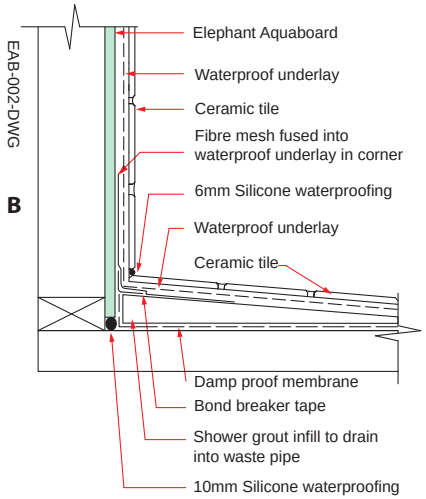
Galvanised steel corner angle

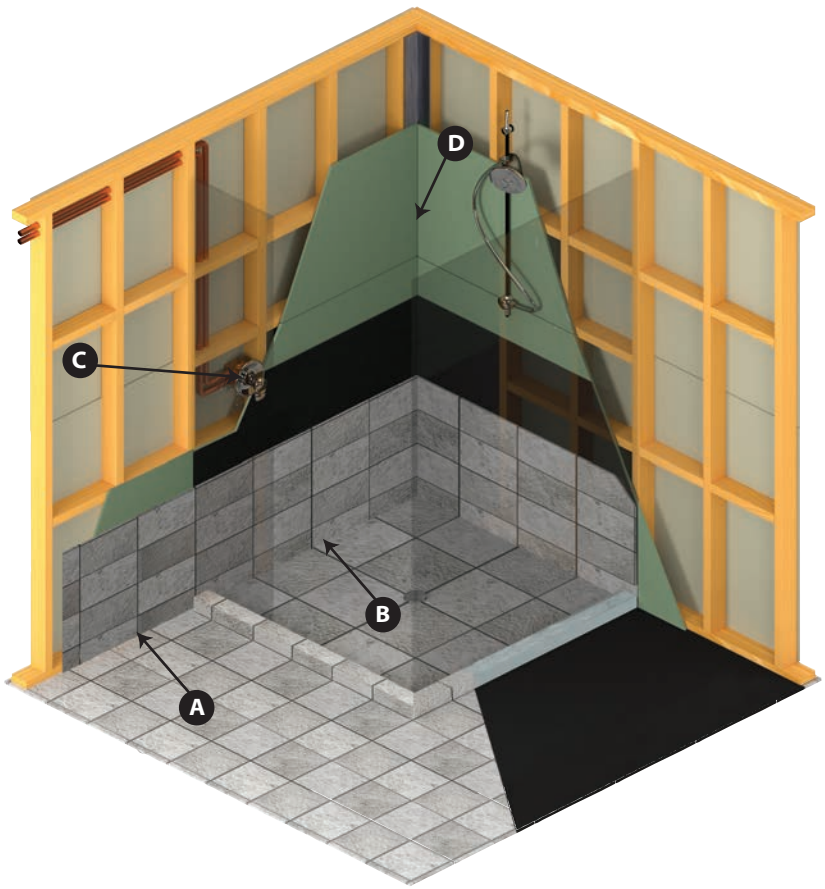
A galvanised metal angle of minimum dimension 32mm x 32mm x .55mm BMT shall be installed in the corner of the shower before any plasterboard is installed, this ensures that any sudden movement in the shower will maintain the structural stability of the timber framing behind the shower and possible stop the tiles from cracking or displacement.

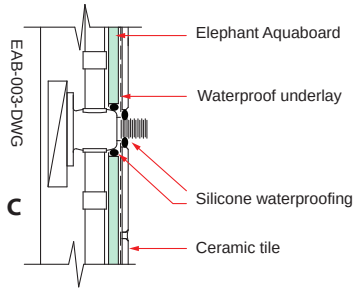
Fibre mesh and waterproof underlay

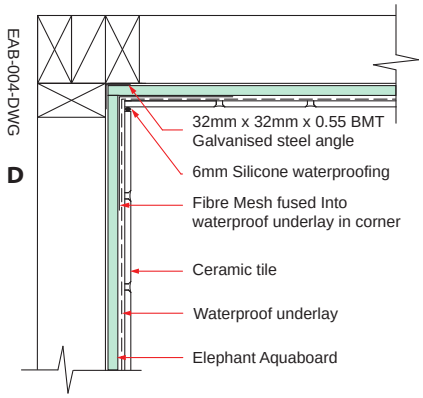
- A waterproof membrane must be applied to the tiled areas, refer to manufacturers recommendations and installation on waterproof membranes.
- All corners of the tiled area in the shower need embed reinforcing mats in the waterproofing membrane, refer to the manufacturers specifications and installation procedures.











DESIGN DETAIL

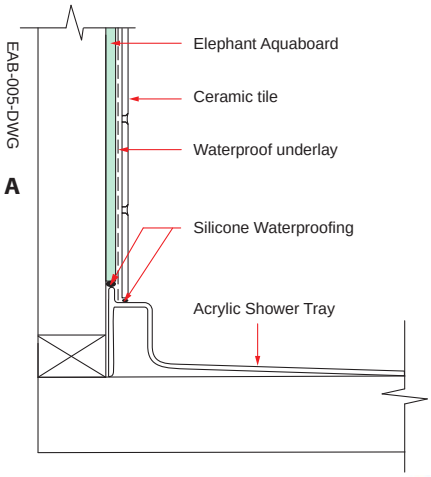
Showers - Tiled Walls and Acrylic Base

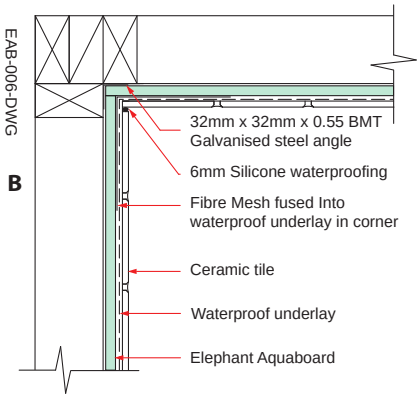
Galvanised steel corner angle

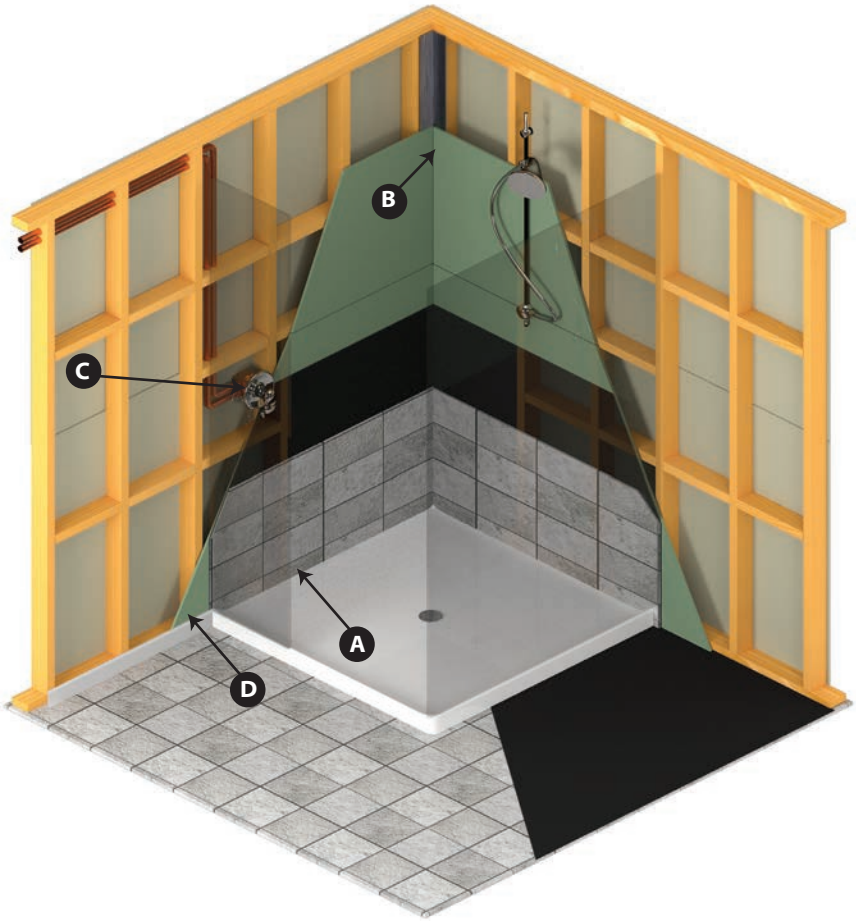
A galvanised metal angle of minimum dimension 32mm x 32mm x .55mm BMT shall be installed in the corner of the shower before any plasterboard is installed, this ensures that any sudden movement in the shower will maintain the structural stability of the timber framing behind the shower and possible stop the tiles from cracking or displacement.

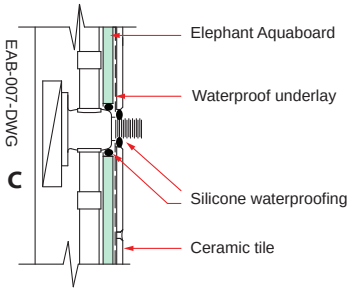
Fibre mesh and waterproof underlay

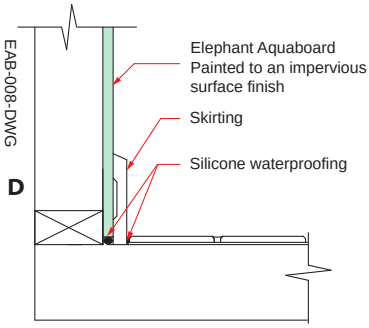
- A waterproof membrane must be applied to the tiled areas, refer to manufacturers recommendations and installation on waterproof membranes.
- All corners of the tiled area in the shower need embed reinforcing mats in the waterproofing membrane, refer to the manufacturers specifications and installation procedures.







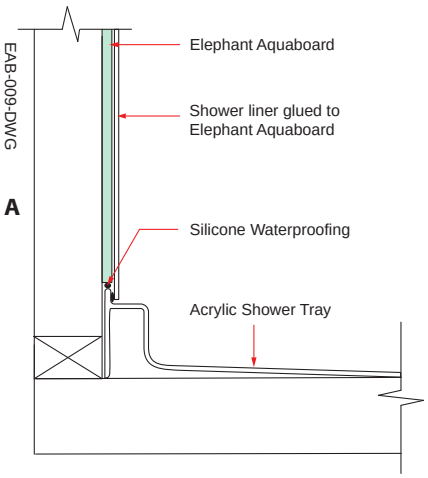


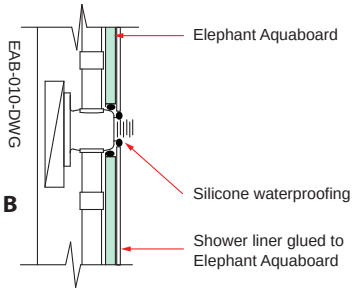


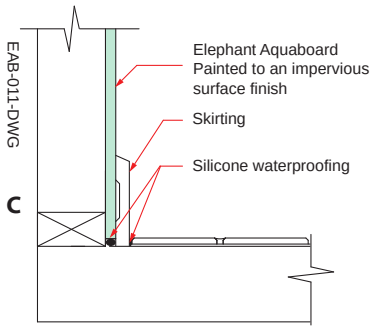
DESIGN DETAIL

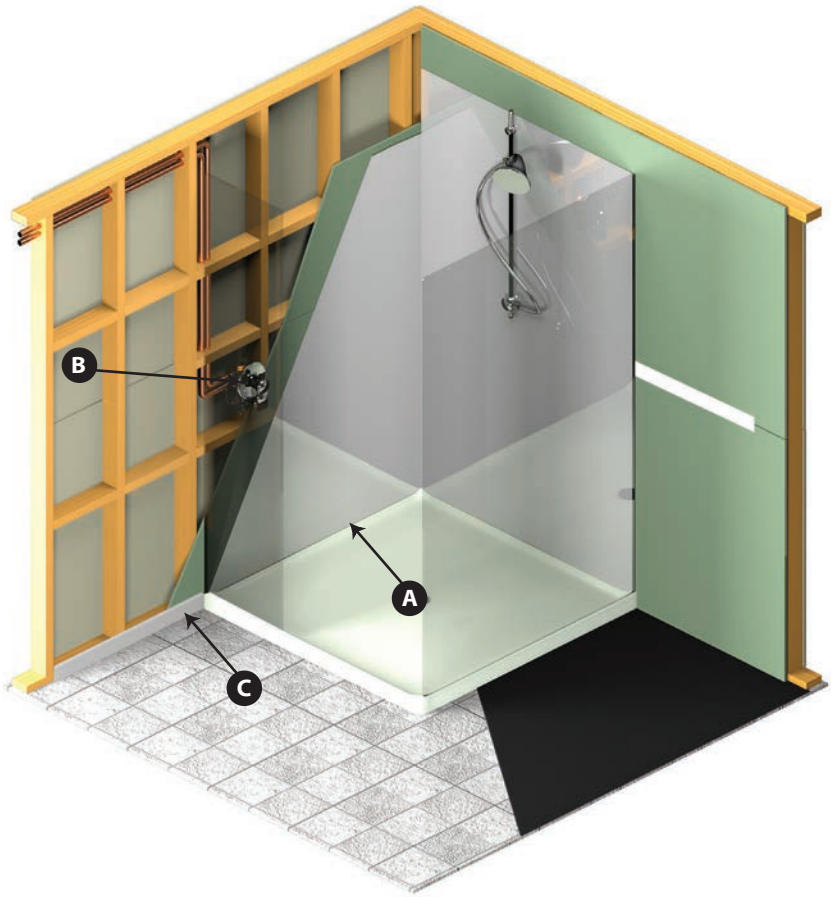
Showers - Acrylic Liners & Base

- After fixing and stopping the Aquaboard to the shower enclosure area, it is not recommended that the Aquaboard be painted before gluing the acrylic liner to the wall surface, as the glue needs to bed into the surface of the paper before the acrylic liner is attached to the wall.
- Acrylic type showers are supplied by manufacturers and special consideration must be given before installation and fixing the shower liners. Ensure you read and follow all requirements and instructions.
- Ensure a bead of waterproof sealant is used between the top of the liner and the Aquaboard.









Note:
All details may be downloaded from our website.

DESIGN DETAIL

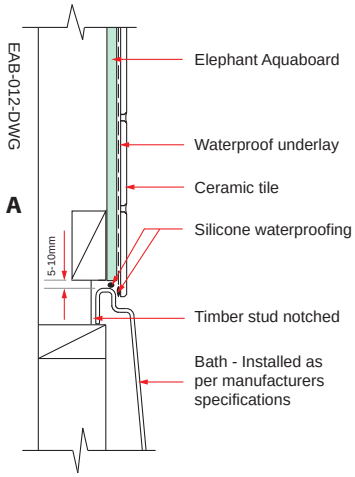
Shower Over Baths - Tiled Walls and Tiled Floor

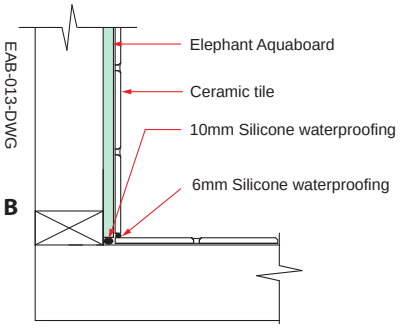
Galvanised steel corner angle

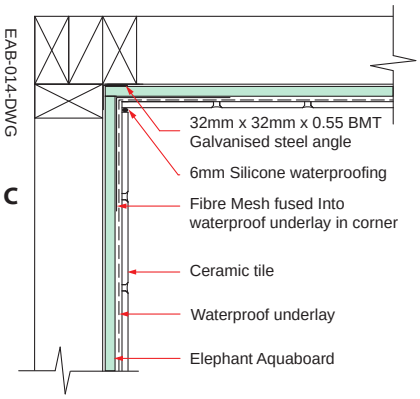
It is highly recommended that a 32mm x 32mm x .55mm BMT galvanised equal angle plate is installed in the corner of the shower before any plasterboard is installed, this ensures that any sudden movement in the shower will maintain the structural stability of the timber framing behind the shower and possible stop the tiles from cracking or displacement.

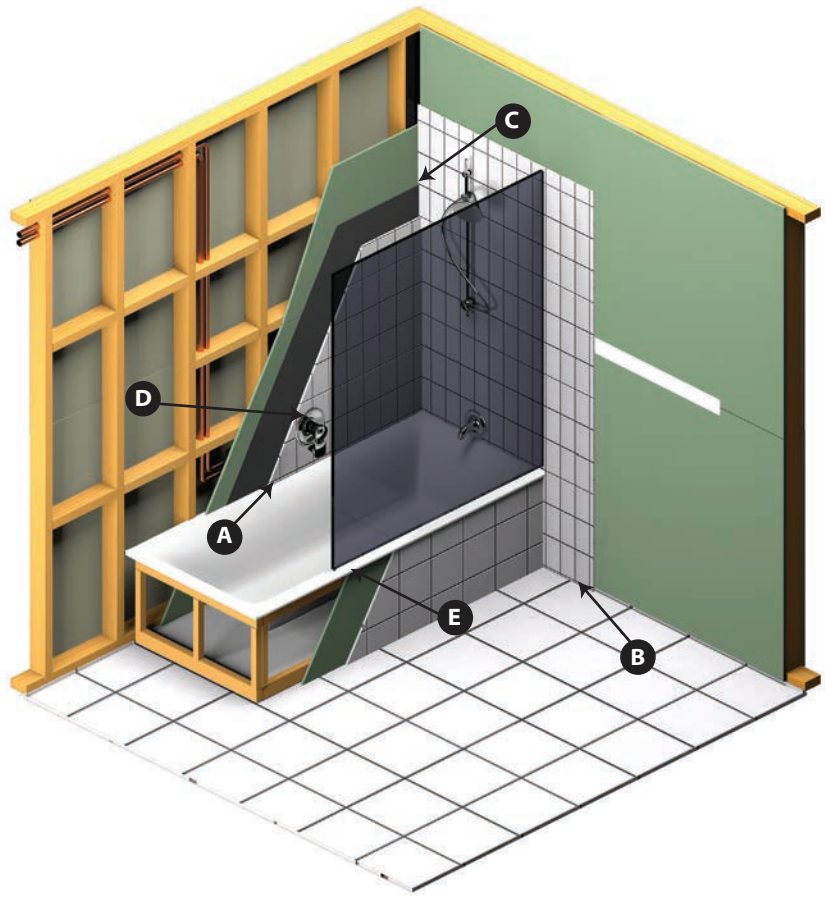
Fibre mesh and waterproof underlay

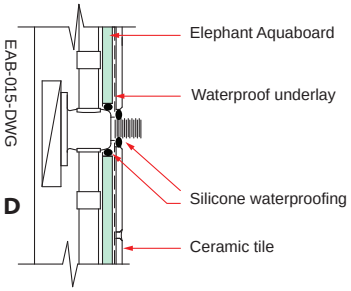
- A waterproof membrane must be applied to the tiled areas, refer to manufacturers recommendations and installation on waterproof membranes.
- All corners of the tiled area in the shower need embed reinforcing mats in the waterproofing membrane, refer to the manufacturers specifications and installation procedures.

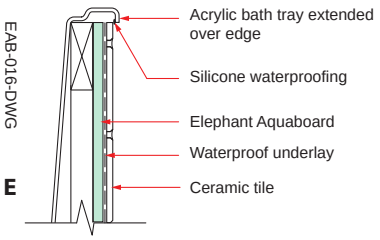








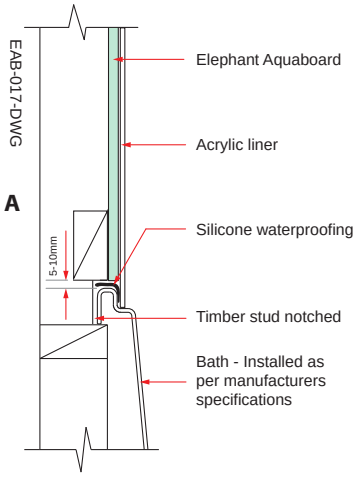


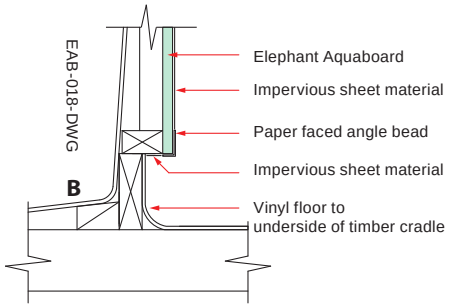


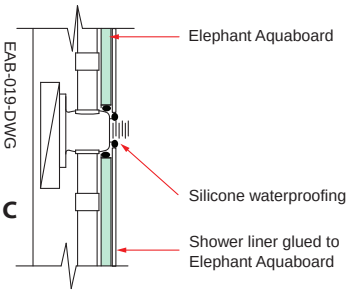
DESIGN DETAIL

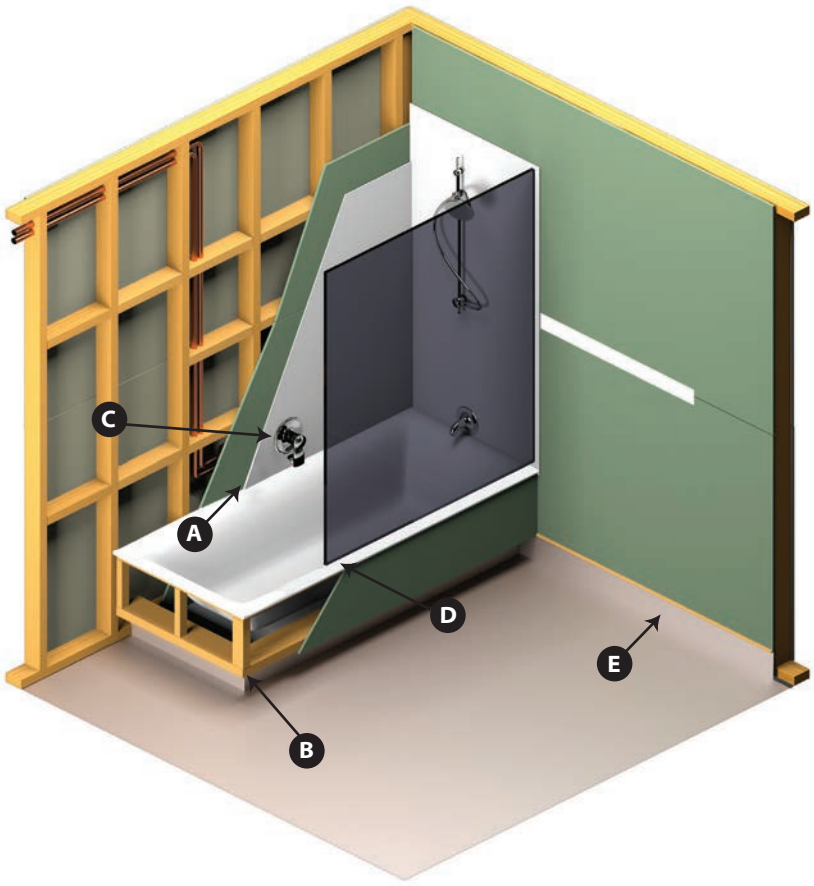
Shower Over Baths - Acrylic Wall and Vinyl Flooring

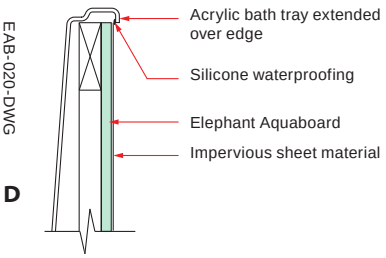
- After fixing and stopping the Aquaboard to the shower enclosure area, it is not recommended that the Aquaboard be painted before gluing the acrylic liner to the wall surface, as the glue needs to bed into the surface of the paper before the acrylic liner is attached to the wall.
- Acrylic type showers are supplied by manufacturers and special consideration must be given before installation and fixing the shower liners. Ensure you read and follow all requirements and instructions.
- Ensure a bead of waterproof sealant is used between the top of the liner and the Aquaboard.

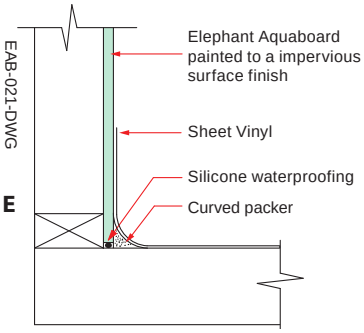












DESIGN DETAIL

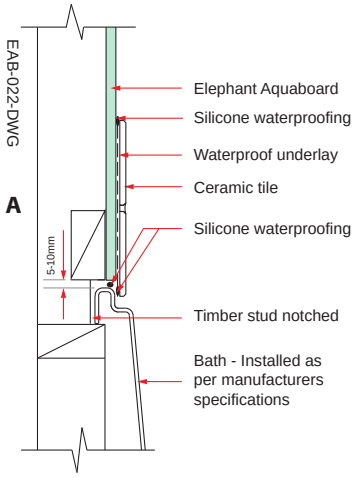
Tiled Bath Upstand and Typical Vanity

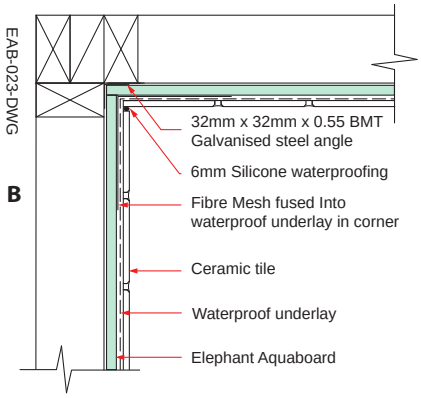
Galvanised steel corner angle

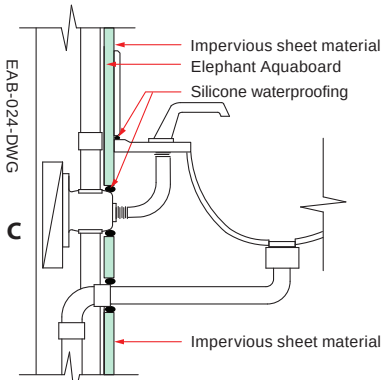
It is highly recommended that a 32mm x 32mm x .55mm BMT galvanised equal angle plate is installed in the corner of the tiled upstand before any plasterboard is installed, this ensures that any sudden movement in the shower will maintain the structural stability of the timber framing behind the shower and possible stop the tiles from cracking or displacement.

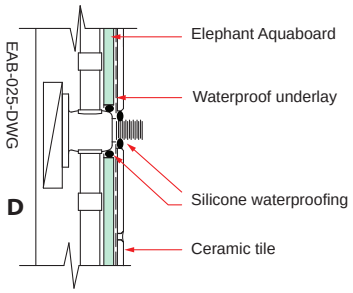
Fibre mesh and waterproof underlay

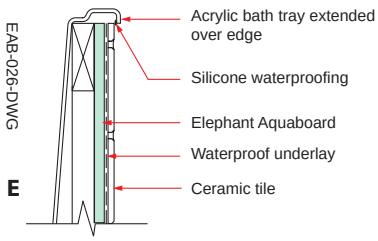
- A waterproof membrane must be applied to the tiled areas, refer to manufacturers recommendations and installation on waterproof membranes.
- All corners of the tiled area in the upstand need embed reinforcing mats in the waterproofing membrane, refer to the manufacturers specifications and installation procedures.











DESIGN DETAIL

Kitchen and Laundry Areas

Under the definitions of the New Zealand Building Code E3, laundries are considered as wet areas, and as such need special consideration for lining of walls.

Aquaboard is well suited for this type of installation, refer to generic details on recommended installation.

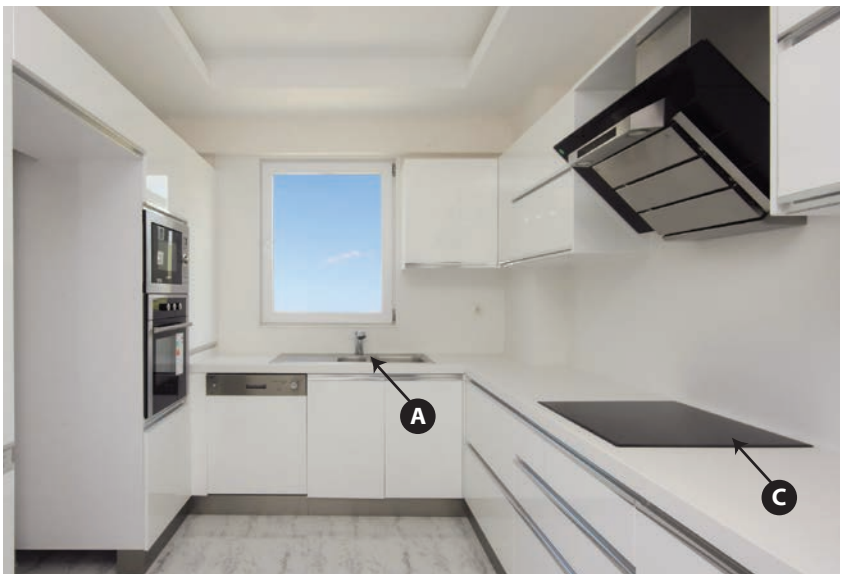
Laundry or kitchen walls lined with tiles to Aquaboard have limitations on tile weight.

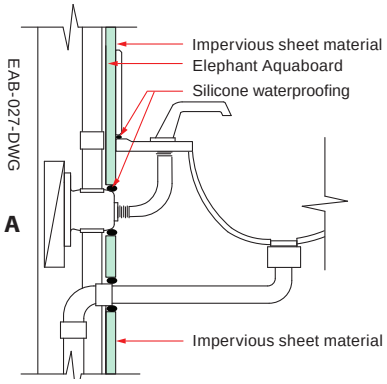
10mm Elephant Aquaboard - tile weights up to and including 20kg per sqm

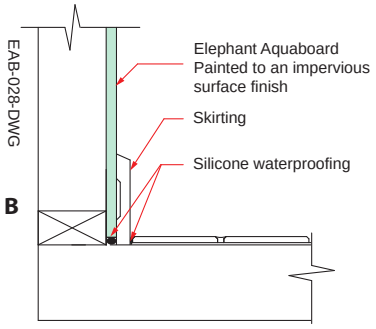
13mm Elephant Aquaboard - tile weights up to and including 32kg per sqm

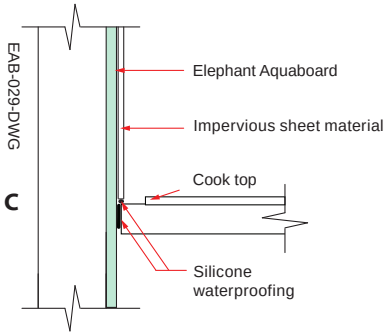
Any type of tiles approved for wet area systems may be used. For further information on tiling consult the BRANZ "Good Practice Guide on Tiling". When tiling an area ensure that screws are centred at least 100mm around the perimeter of the Aquaboard and up each intermediate stud to the tile height. Above that height general fixings are only required.

It is also required by the NZ Building Code to paint all exposed plasterboard surfaces in wet areas to a smooth impervious finish.
It is recommended that a paint manufacturer be consulted for a suitable paint application for wet area surfaces. Although the New Zealand Building Code says nothing regarding the type of lining required in wet areas, it is highly recommended to use Aquaboard in all wet areas due to the boards composition which repels water.









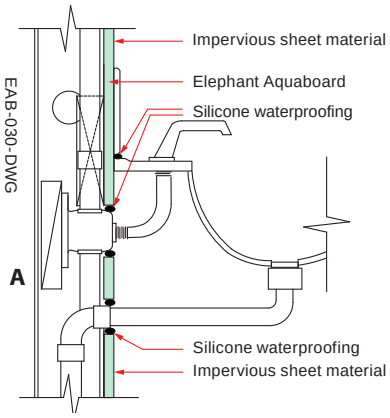
DESIGN DETAIL

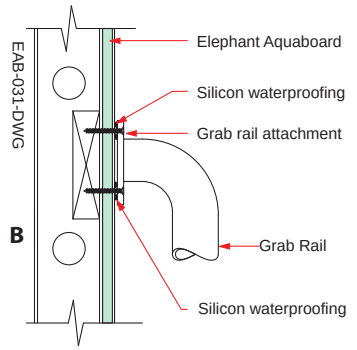
Schools - Hospitals and Commercial Areas

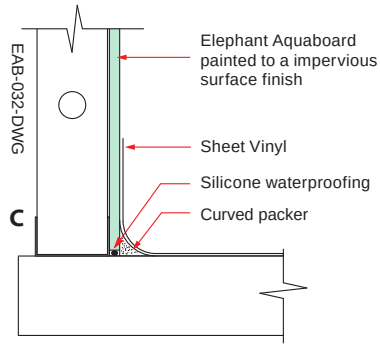
Generally schools, hospitals and commercial areas, such as apartments, offices, and retail etc have special requirements regarding linings to wet areas. Although there is not much difference in lining these areas as per the requirements of the New Zealand Building Code, Elephant Plasterboard highly recommend the use of its Aquaboard in these areas especially where there is a consistent volume of people using these facilities.

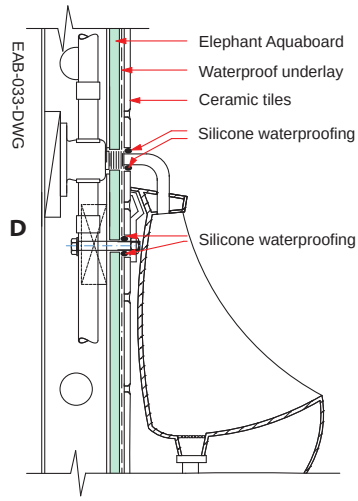
As these areas are usually high impact zones, it is recommended to use 13mm Aquaboard. These areas are usually finished by using vinyl and/or tiles. It is important to note that the NZBC for inter-tenancy walls requires the prevention of water travelling from one unit to another unit. Consideration must be given to all wet areas, and the NZBC calls for a waterproof membrane behind all upstands and tiled walls areas.

Hospitals are a special case where wet areas have Ministry of Health requirements with regard to wall linings, coving and floor areas. As a substrate Aquaboard lining is well suited in these areas. It is important to note that Aquaboard has both sound and fire control properties when built as specialized systems.









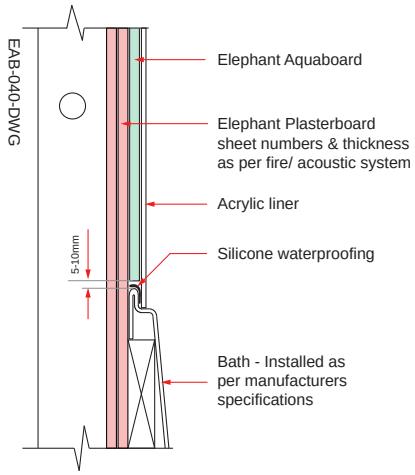
DESIGN DETAIL

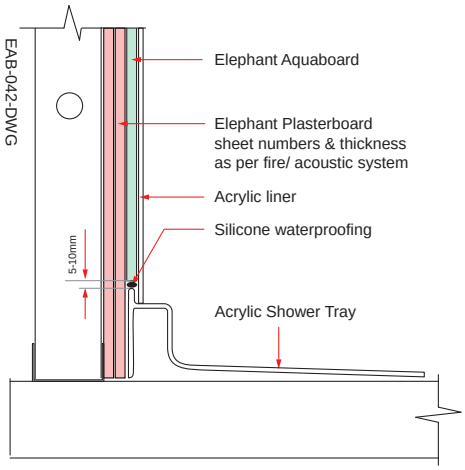
Fire & Noise Control Systems

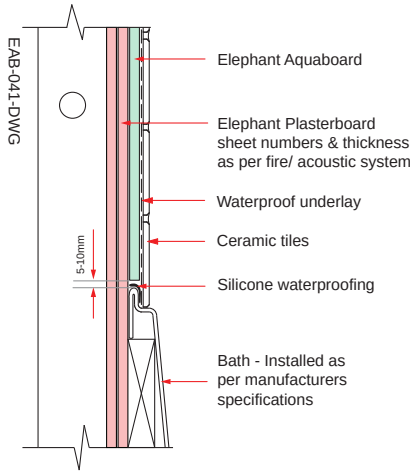
For intertenancy walls and other walls requiring fire and or noise control systems, refer to the design details below.

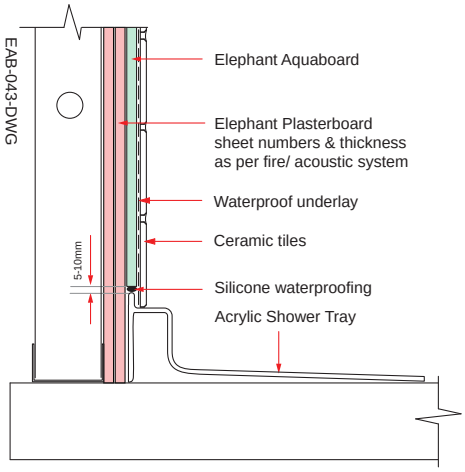
It is important to note that the bath or shower trays are in themselves not fire rated. Therefore extra layers of plasterboard may be required to ensure fire and noise control integrity is maintained.

Consult Elephant Plasterboard technical help line 0800 353 742 or email info@elephantpb.co.nz for assistance.









NOTES

NOTES

ELEPHANT PLASTERBOARD PRODUCT RANGE

Product Weights and available Lengths

THICK-NESS	ELEPHANT PLASTERBOARD PRODUCT RANGE	EDGE TYPE	WIDTH
mm			mm
10	Standard-Plus	TE/TE	1200
13	Standard-Plus	TE/TE	1200
10	Horizontal Standard-Plus	TE/SE	1200
10	Wide Horizontal Standard-Plus	TE/SE	1350
10	Multiboard	TE/TE	1200
13	Multiboard	TE/TE	1200
16	Multiboard	TE/TE	1200
10	Aquaboard	TE/TE	1200
10	Horizontal Aquaboard	TE/SE	1200
13	Aquaboard	TE/TE	1200

WEIGHT	LENGTH							
Kg per m²	2.4m	2.7m	3.0m	3.3m	3.6m	4.2m	4.8m	6.0m
7.4	✓	✓	✓	✓	✓	✓	✓	✓
9.2	✓	✓	✓	✓	✓	✓	✓	✓
7.4	✓		✓		✓	✓	✓	✓
7.4					✓		✓	✓
9.0	✓	✓	✓		✓		✓	
12.0	✓	✓	✓		✓			
13.8	✓	✓	✓					
8.3	✓	✓	✓		✓			
8.3							✓	
11.3	✓	✓	✓		✓			

TE/TE = Tapered Both Edges
TE/SE = Tapered One Edge, Square the Other

Product Primary Functions

THICK-NESS	ELEPHANT PLASTERBOARD PRODUCT RANGE	EDGE TYPE	WIDTH
mm			mm
10	Standard-Plus	TE/TE	1200
13	Standard-Plus	TE/TE	1200
10	Horizontal Standard-Plus	TE/SE	1200
10	Wide Horizontal Standard-Plus	TE/SE	1350
10	Multiboard	TE/TE	1200
13	Multiboard	TE/TE	1200
16	Multiboard	TE/TE	1200
10	Aquaboard	TE/TE	1200
10	Horizontal Aquaboard	TE/SE	1200
13	Aquaboard	TE/TE	1200

PRIMARY FUNCTIONS						
Horizontal Fixing	Span 600* Centres on Ceilings	Bracing	Fire Resistant	Noise Control	Impact Resistant	Water Resistant
	✓	✓	✓			
	✓	✓	✓			
✓		✓	✓			
✓		✓	✓			
	✓	✓	✓	✓		
	✓	✓	✓	✓	✓	
	✓		✓		✓	
			✓	✓		✓
✓			✓			✓
	✓		✓	✓	✓	✓

* In areas with significant temperature or humidity variations e.g. bathrooms, it is recommended to place battens at maximum 450mm centres when using 10mm Standard-Plus or 10mm Aquaboard

Elephant Plasterboard
Wet Area Systems Manual
July 2017

Elephant Plasterboard (NZ) Limited

FOR MORE INFORMATION VISIT

www.elephantplasterboard.co.nz
email info@elephantpb.co.nz
call 0800 ELEPHANT (353 742)

Elephant Plasterboard
STRENGTH WITH STYLE